In the Claims:

1. (Original) A method for reading a digital watermark in a media signal comprising:

assigning sets of media signal samples into classes;

computing a statistical distribution of the classes; and

using the statistical distribution to detect or read a watermark in the media signal.

2. (Original) The method of claim 1 wherein the media signal is an audio signal.

3. (Original) The method of claim 1 wherein the media signal is an image signal.

4. (Previously presented) The method of claim 3 wherein the image signal samples are expressed in a frequency domain.

5. (Previously presented) The method of claim 4 wherein the image signal samples are spatial frequency coefficients.

6. (Original) The method of claim 1 wherein the samples are in a spatial or temporal domain.

7. (Original) The method of claim 1 wherein using the statistical distribution includes:

assigning a figure of merit to a sample indicating a likelihood that the sample includes a recoverable portion of a watermark signal; and using the figure of merit in a read operation.

8. (Original) The method of claim 7 wherein assigning a figure of merit includes assigning a weight to the sample indicating an extent to which the sample is likely to reflect valid watermark data.

9. (Original) The method of claim 1 wherein using the statistical distribution includes:

assigning a figure of merit to a sample indicating a likelihood that the sample includes a recoverable portion of a watermark signal; and using the figure of merit in a watermark decoding operation.

10. (Original) The method of claim 9 wherein assigning a figure of merit includes assigning a weight to the sample indicating an extent to which the sample is likely to reflect valid watermark data.

11. (Original) A computer readable medium on which is stored software for performing the method of claim 1.

12. (Currently amended) A method for reading a digital watermark in an image comprising:

assigning transformed samples of the image into classes using characteristics computed from the samples to group the samples into the classes;

modeling a statistical distribution of the samples in each of the classes to compute models of the statistical distributions of the classes; and

using the [statistical model] models of the statistical distributions to decode a watermark from the samples.

13. (Previously presented) The method of claim 12 wherein the characteristics comprise signal activity of the samples, and the signal activity of the samples is evaluated and the samples are assigned to the classes based on signal activity.

14. (Original) A computer readable medium on which is stored software for performing the method of claim 12.

15. (Previously presented) A method for reading a digital watermark in a watermarked signal comprising:

assigning samples of the watermarked signal into classes using characteristics computed from the samples to group the samples into the classes;

computing a statistical distribution of the samples in each of the classes; and

using the statistical distribution to decode a watermark from the watermarked signal.

16. (Previously presented) The method of claim 15 wherein sets of samples are assigned to classes based on a signal characteristic of the samples in the sets.

17. (Original) The method of claim 16 wherein the signal characteristic is a measure of signal energy.

18. (Original) A computer readable medium on which is stored software for performing the method of claim 15.

19. (Original) A method for estimating a watermark signal from a media signal suspected of containing the watermark signal, the method comprising:

assigning samples of the suspect signal into classes based on a signal characteristic of the samples;

modeling distributions of the classes; and

estimating the watermark signal based on the suspect signal, the distributions of the classes, and a distribution of the watermark signal.

20. (Original) A computer readable medium on which is stored software for performing the method of claim 19.